II. CLAIMS

1. (Currently amended) A method for transferring image information from a camera module ~~(1)~~ to an electronic device, ~~such as a mobile station (23),~~ in which ~~camera module (1)~~ an image is formed in the camera module by an image sensor ~~(2)~~ comprising pixels ~~where~~which convert ~~the~~ light to which the pixels ~~(P1,1 - Pm,n)~~ are exposed ~~is converted~~ into an analogue signal which is converted into digital image information, and the digital image information is transferred to the electronic device under the control of the electronic device, **characterised** in that ~~the image information is transferred in serial form and that the transfer of image information is controlled from the electronic device~~ the camera module is adapted to operate in either one of a normal photographic mode and a viewfinder mode, wherein when operating in viewfinder mode the camera module reduces the quantity of digital image information to be transferred from the camera module to the electronic device compared with the quantity of digital image information that is transferred when the camera operates in normal photographic mode.

2. (Cancelled)

3. (Currently amended) ~~The~~A method according to claim ~~2~~1, **characterised** in that ~~the adjustment~~reduction of the quantity of digital image information to be transferred from the camera module ~~(1)~~ is conducted by adjusting the conversion accuracy of the analogue ~~/~~to digital conversion.

4. (Currently amended) ~~The~~ A method according to claim ~~2~~1, **characterised** in that ~~the adjustment~~ reduction of the quantity

of information to be transferred from the camera module ~~(1)~~ is conducted by ~~adjusting~~ reducing the resolution of the image.

5. (Currently amended) ~~The~~ A method according to claim 4, **characterised** in that ~~the adjustment~~ reduction of the resolution of the image is conducted by under- sampling ~~of~~ the digital image information.

6. (Currently amended) ~~The~~ A method according to claim 4, **characterised** in that the resolution of the image is restored in the electronic device ~~(23), the resolution is restored~~ by interpolation from the received digital image information.

7. (Currently amended) A camera module ~~(1)~~ comprising an image sensor ~~(2)~~ with pixels ~~(P1,1 Pm,n)~~ for conducting photoelectric conversion, and means ~~(6, 7)~~ for conversion of ~~the~~an analogue signal generated by said pixels into digital ~~form~~image information, the camera module further comprising means for transferring digital image information to an electronic device under control of the electronic device, **characterised** in that ~~the camera module (1) further comprises means (10) for transferring digital image information to an electronic device, such as a mobile station (23), in serial form and means (11, 16) for conducting the transfer of the image information under control by the electronic device (23)~~ the camera module is adapted to operate in either one of a normal photographic mode and a viewfinder mode, and comprises means for reducing the quantity of digital image information to be transferred from the camera module to the electronic device when operating in viewfinder mode compared with the quantity of digital image information that is transferred when the camera operates in normal photographic mode.

8. (Cancelled)

9. (Currently amended) ~~The~~A camera module ~~(1)~~ according to claim ~~8~~7, **characterised** in that said means ~~(11)~~ for ~~adjusting~~reducing the quantity of digital image information to be transferred from the camera module ~~(1)~~ comprises means ~~(13)~~ for adjusting the conversion accuracy of the analogue~~/~~ to digital conversion.

10. (Currently amended) ~~The~~A camera module ~~(1)~~ according to claim ~~8~~7, **characterised** in that said means ~~(11)~~ for ~~adjusting~~reducing the quantity of digital image information to be transferred from the camera module ~~(1)~~ comprises means ~~(15, 33)~~ for ~~adjusting~~reducing the resolution of the image.

11. (Currently amended) ~~The~~A camera module ~~(1)~~ according to claim 10, **characterised** in that said means ~~(33)~~ for ~~adjusting~~reducing the resolution of the image comprises means ~~(12, 13)~~ for under-sampling ~~of~~ the digital image information.

12. (Cancelled)

13. (Currently amended) A mobile station ~~(23)~~, ~~**characterised in that it**~~ comprise~~s~~ing:

- means ~~(10)~~ for connecting to a camera module ~~(1)~~, the camera module ~~(1)~~ comprising an image sensor ~~(2)~~ with pixels ~~(1,1 ... Pm,n)~~ for conducting a photoelectric conversion, and means ~~(6, 7)~~ for converting ~~the~~an analogue signal generated by the ~~photoelectric conversion means~~image sensor into digital ~~form~~image information~~,~~; and

- means ~~(24, 25)~~ for controlling the transfer of digital image information formed by the camera module ~~(1)~~ to the mobile station~~, and~~,

~~means (24) for transferring the image information formed by the camera module (1) to the mobile station in serial form.~~

characterised in that the mobile station further comprises means for setting the camera module to operate in either one of a normal photographic mode and a viewfinder mode, wherein when operating in viewfinder mode the camera module reduces the quantity of digital image information to be transferred from the camera module to the electronic device compared with the quantity of digital image information that is transferred when the camera operates in normal photographic mode.

14. (Cancelled)

15. (New) A mobile station according to claim 13, comprising an external connection bus for transferring said digital image information from the camera module to the mobile station.

16. (New) A mobile station according to claim 15, **characterised** in that said external connection bus comprises a serial bus and a control serial bus and that the mobile station is adapted to transfer control information to the camera module via said control serial bus and to receive digital image information from the camera module in serial form via said serial bus.

17. (New) A mobile station according to claim 15, **characterised** in that said external connection bus is adapted for connection with the camera module by means of conductors.

18. (New) A mobile station according to claim 15, **characterised** in that said external connection bus is adapted for connection with the camera module by means of infrared transmission.

19. (New) A mobile station according to claim 13, further comprising means for transmitting digital image information transferred from the camera module to the mobile station further from the mobile station via a mobile communication network.

20. (New) A camera system comprising a camera module and an electronic device, the camera module comprising an image sensor with pixels for conducting photoelectric conversion, and means for conversion of an analogue signal generated by said pixels into digital image information, the camera module further comprising means for transferring digital image information to the electronic device under control of the electronic device, the electronic device comprising means for connecting to the camera module, and means for controlling the transfer of digital image information formed by the camera module to the electronic device, **characterised** in that the camera module is adapted to operate in either one of a normal photographic mode and a viewfinder mode, and comprises means for reducing the quantity of digital image information to be transferred from the camera module to the electronic device when operating in viewfinder mode compared with the quantity of digital image information that is transferred when the camera operates in normal photographic mode and the electronic device comprises a display for displaying the digital image information transferred from the camera module.

21. (New) A method according to claim 1, **characterised** in that the camera module is set into viewfinder mode responsive to a control signal received from the electronic device.

22. (New) A method according to claim 1, **characterised** in that the camera module is set into normal photographic mode responsive to a control signal received from the electronic device.

23. (New) A method according to claim 1, **characterised** in that the transfer of digital image information from the camera module to the electronic device is started responsive to a control signal received from the electronic device.

24. (New) A method according to claim 1, **characterised** in that a picture is taken by the camera module responsive to a control signal received from the electronic device.

25. (New) A method according to claim 1, **characterised** in that reduction of the quantity of digital image information to be transferred from the camera module is conducted by leaving less significant bits of the digital image information untransferred.

26. (New) A method according to claim 1, **characterised** in that the camera module captures an image with maximum resolution and reduces the quantity of digital image information to be transferred at the stage when the digital image information is transferred to the electronic device.

27. (New) A method according to claim 1, **characterised** in that the image is displayed on a display of the electronic device.

28. (New) A method according to claim 1, **characterised** in that the camera module crops a region from an image and transfers the digital image information of the cropped region to the electronic device.

29. (New) A method according to claim 28, **characterised** in that the electronic device sends information about the region of the image to be cropped to the camera module.

30. (New) A method according to claim 1, **characterised** in that the electronic device is a mobile station and the method comprises transmitting digital image information transferred from the camera module to the mobile station further from the mobile station via a mobile communication network.

31. (New) A camera module according to claim 7, adapted to be set into viewfinder mode responsive to a control signal received from the electronic device.

32. (New) A camera module according to claim 7, adapted to be set into normal photographic mode responsive to a control signal received from the electronic device.

33. (New) A camera module according to claim 7, adapted to start the transfer of digital image information from the camera module to the electronic device responsive to a control signal received from the electronic device.

34. (New) A camera module according to claim 7, adapted to take a picture responsive to a control signal received from the electronic device.

35. (New) A camera module according to claim 7, **characterised** in that said means for reducing the quantity of digital image information to be transferred from the camera module is arranged to leave less significant bits of the digital image information untransferred.

36. (New) A camera module according to claim 7, adapted to capture an image with maximum resolution and to reduce the quantity of digital image information to be transferred at the stage when the digital image information is transferred to the electronic device.

37. (New) A camera module according to claim 7, adapted to crop a region from an image and to transfer the digital image information of the cropped region to the electronic device.

38. (New) A camera module according to claim 7, **characterised** in that it is a separate module from said electronic device and comprises an external connection bus for transferring said digital image information to the electronic device.

39. (New) A camera module according to claim 38, **characterised** in that said external connection bus comprises a serial bus and a control serial bus and that the camera module is adapted to transfer digital image information to the electronic device in serial form via said serial bus and is adapted to receive control information from the electronic device via said control serial bus.

40. (New) A camera module according to claim 38, **characterised** in that said external connection bus is adapted for connection with the electronic device by means of conductors.

41. (New) A camera module according to claim 38, **characterised** in that said external connection bus is adapted for connection with the electronic device by means of infrared transmission.

42. (New) A camera module according to claim 38, adapted for use with a mobile station.

43. (New) A camera module according to claim 7, **characterised** in that said camera module is integrated in the electronic device.